

TO: MR FRED ESTES  
(PUB WKS)

FM: LTCOL Buckner  
(Range Control O.)

- SOTC MOUT COMMENTS

Capt. VIKS COMMENTS  
dtd 7/17/87

Capit. Vols. 2  
11/11/11

June 30, 1987

Department of the Navy  
Atlantic Division  
Naval Facilities Engineering Command  
Building N-26, Gilbert Street  
Norfolk, Virginia 23511-6287

Attention: Ms. Susan Gale, P.E.  
Code 09A21B3

Reference: FY-88, MCON Project P-846  
Operations Training Complex  
Military Operations in Urbanized Terrain  
(M.O.U.T.)  
Marine Corps Base, Camp Lejeune, NC

**CLARK**  
**TRIBBLE**  
**HARRIS**  
**CO.**  
*Architects & Engineers*

Gentlemen:

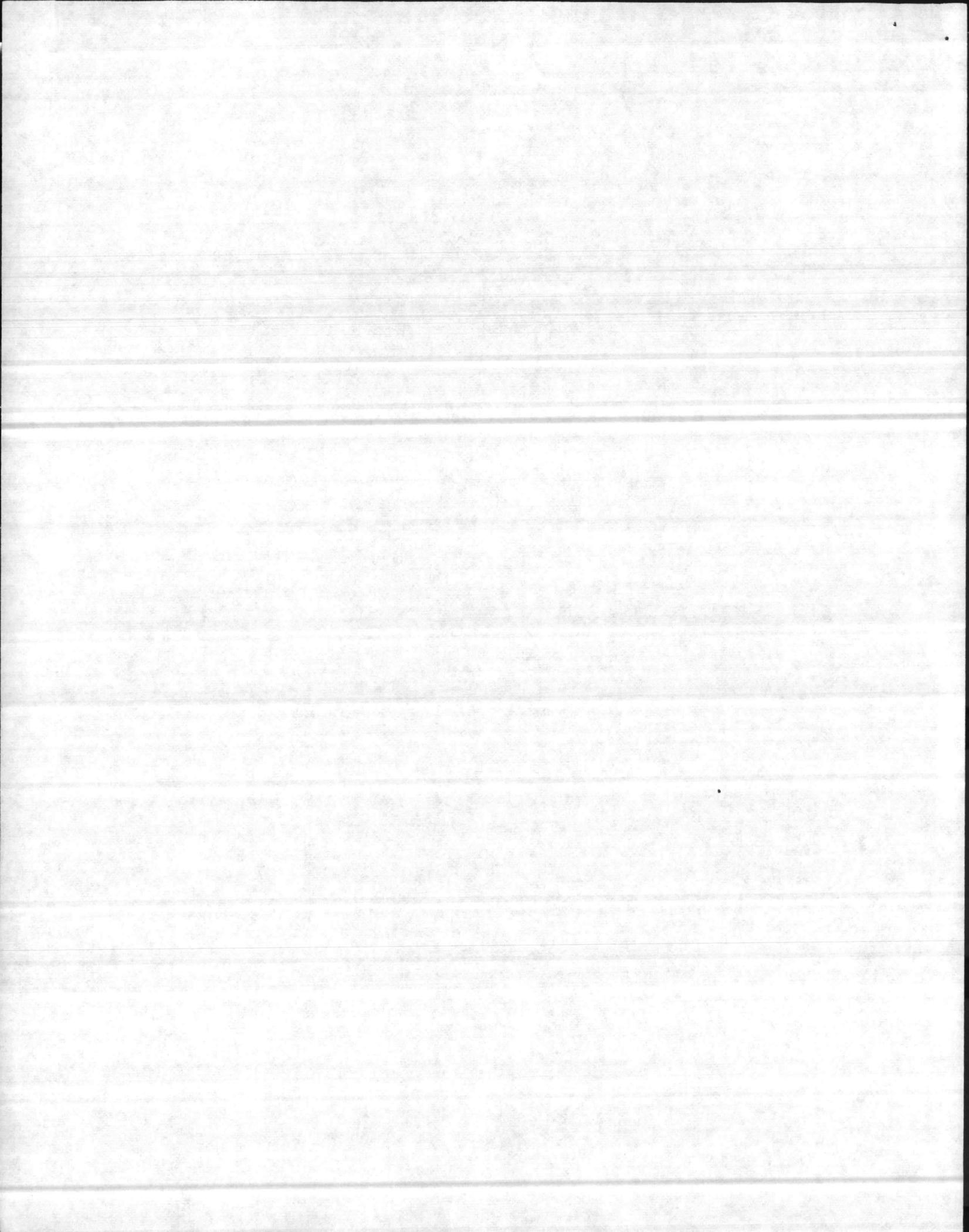
During our meeting in Norfolk on March 19, 1987, we discussed several items which were Activity recommendations for a better MDUT facility. We agreed to prepare a brief statement of probable cost for each of the items discussed and to also prepare a fee proposal. Afterwards, we concluded that we would prepare the statement of probable cost, and if you wish to add any of the items to our contract, we will prepare a fee proposal tailored to your selections. Our fee will fall within the allowable 6% of construction cost plus additional costs for printing, etc.

Please refer to our Conference Memorandum dated March 19, 1987, page 10 of 13, for items estimated.

1. Develop a section of continuous storefront bazaars.

*No reduction in the combined store front area of Bldg. 12 & 20 should be attempted. Many store fronts are a whole block long. Reduction in bldg. area behind the store front is preferable to reduction to the store front area because of the unique challenges movement and clearing along a storefront provides*

As our memo states, we do not think this item is a scope change. In an attempt to satisfy the Activity, we sent a letter to Lt. Col. Lee Gound on May 7, 1987 which stated that buildings 12 and 20 had been redesigned, as requested. These two buildings are now more or less one building. Since building 12 was formerly the same plan as building 9, the new design offers more building features than before. Additionally, reduction of the overall length of buildings 12 and 20 creates an open area between the new design and the City Hall (building no. 2), which we are developing into an urban park.



During the month of May, we received a call from Fred Estes, who stated that this proposal was accepted. We do not expect additional fees for this work, nor do we anticipate a change in construction cost.

Towers should be designed to be consistent with the esthetics of the city (e.g. microwave towers, bell towers, fire station siren towers, factory smokestacks etc.) The proposed towers without looking at the plans do not seem consistent in terms of cost with towers found in an urban environment!! It seems to me that the church tower and tower at Bldg 24 would be sufficient to observe all activities within the area. Additional towers may give a 'Pow camp' appearance and will increase the hazards to aviation.

2. Install four (4) towers for video taping.

The church bell tower will serve as one of these four towers. A second tower, between building nos. 17 and 18 will cost approximately \$125,000.00. A third tower, behind building no. 23 will cost approximately \$98,500.00. A fourth tower, an addition to building no. 24, will cost approximately \$108,250.00. Design of these three towers is an addition to our contract.

3. Add electricity to building no. 8.

Again, we stated that this item would not be a scope change. Our estimate to include this work is only \$7,500.00 and we have, therefore, elected to include this work in our pre-final submittal. We do not expect additional fees for this effort.

Insure that at least one building has an elevator shaft. This should be in the Hotel as most Hotels are so equipped if no cost increase is involved.

Building no. 6 has an elevator shaft. → OK if above is too costly.

4. Buildings should have fire escapes.

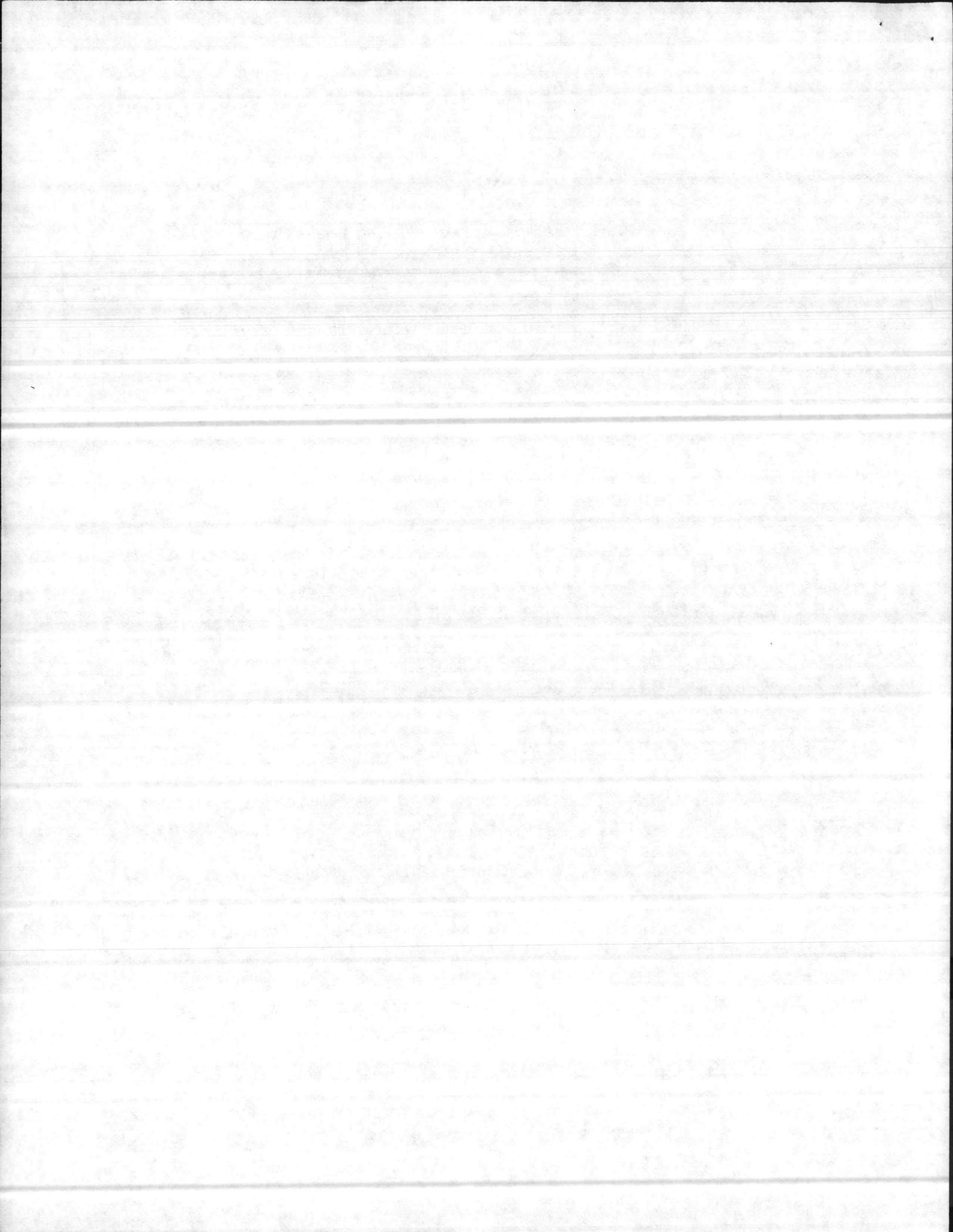
Buildings no. 9 and 17 are equipped with fire escape ladders.

5. Buildings should have fire escapes.
6. Include municipal lights and telephone poles.

This item was added to our pre-final submittal. Although no additional fee is expected, these lights will increase construction cost approximately \$26,000.00.

7. Incorporate security walls around buildings.

Again, this task is within our current scope-of-work. At this time, however, we do not have an estimate of construction cost for this element of the design.



Again the overall design of the MOUT facility must account for our area of operation (Mediterranean, Mid-East). Narrow alleys are very common as are

8. Need narrow alleys and buildings in close proximity.

We feel our site design is adequate for the Activity's use. We do not intend to impair the mission of the Activity, however, and will work with them to include any elements our pre-final submittal does not address to their satisfaction.

9. Utilize a variety of doors and door frames.

We have revised our drawings to reflect the decision made in the Value Engineering review meeting. Specifically, we are providing hollow metal frames in all masonry door openings with 100% exterior hollow metal and 25% interior hollow metal doors. This is not an addition to our scope-of-work, but will increase construction cost approximately \$52,953.00 as indicated on the Value Engineering Spread Sheet. Our pre-final submittal will indicate that we have included this work.

Bldg. size is 62'x92' and far larger than desired. Preferable is a bldg. such as one of the business, retail, or office structures.

A building as large as #23 would be difficult to break up. It could make 6 rooms of about 20'x42' size or 12 rooms of 15'x30' size. These are not standard size rooms in the European theatre. A smaller building would be desirable.

10. Construct certain floors of buildings with movable internal walls.

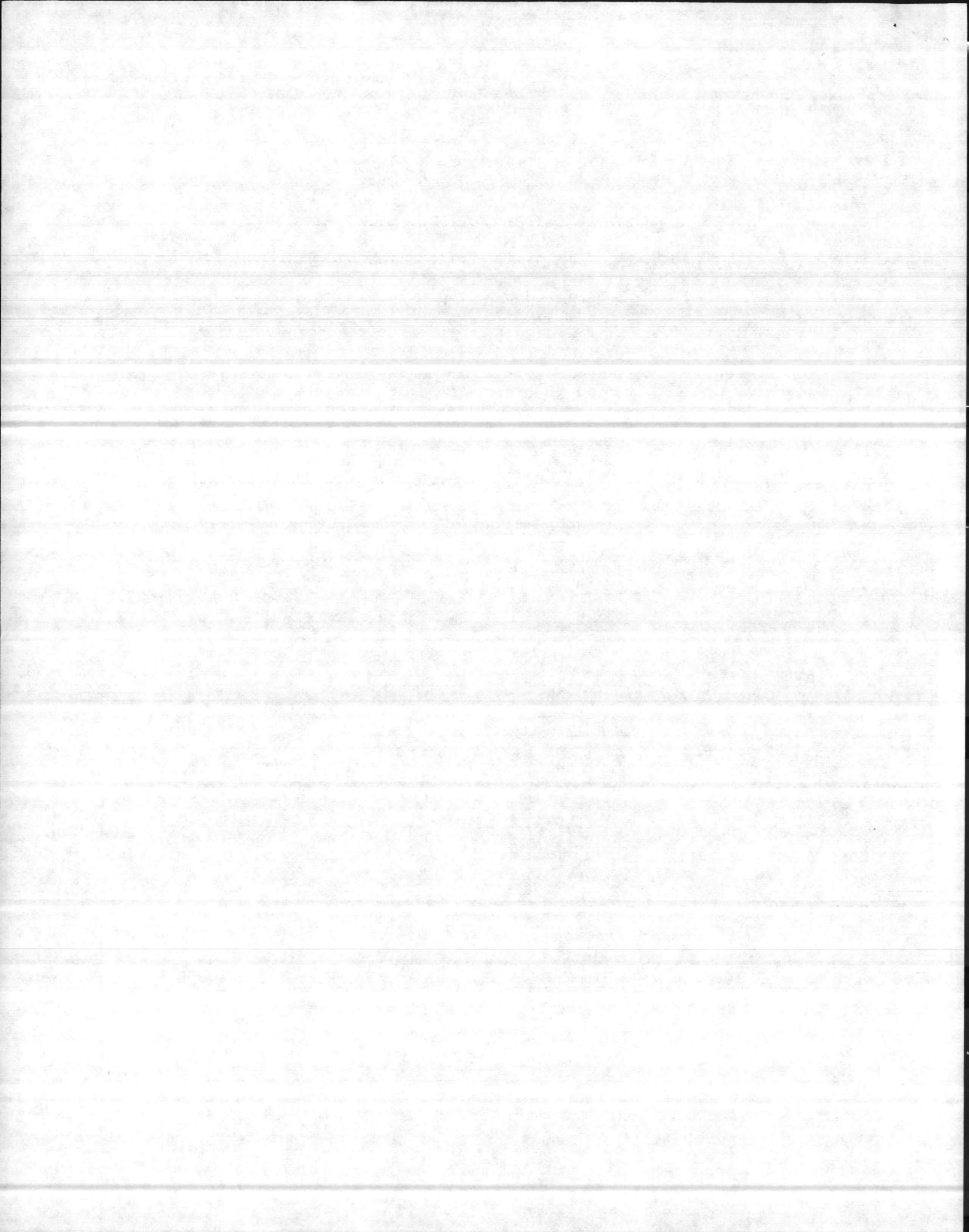
We have not addressed this item. Building no. 23, however, has no interior partitions and would be an ideal area for a flexible set-up. We have provided this open area without load bearing walls or columns so the Activity may construct any configuration they desire.

11. Establish controls for light, power, and water so that areas, streets, or even individual buildings can be controlled.

We do not think this requirement is beyond our scope-of-work. Also, since this item would only increase construction cost by approximately \$7,950.00, we have included the work in our pre-final submittal. Please note there is no water in the project.

12. Include obstacles around buildings.

Our pre-final submittal includes walls, fences, statues, gates, landscaping, etc. within our scope-of-work. We do not intend to include clothes lines, TV antennas, etc. in our proposal. We feel the Activity can install these at less cost than a Contractor. Agree.



#13.

Obstacles such as commonly found on roof tops such as air vents, antennas, air conditioning units, elevators shaft houses provide rope tie-down joints for rappelling down or ascending. They may also provide access to floors below as in the case of the elevator shaft. As this is a simple, inexpensive alteration it should be included in the final plan for those bldgs where appropriate.

3. Add obstacles to building roofs.

This item was rejected during the meeting.

14. Identify one building as a communications counter.

During the meeting in March, we agreed to identify one of the buildings with a sign. The Activity will provide antennas, etc. to make the building appear more realistic as a communication center.

15. Provide power to the exterior of several buildings.

This item has been included in the pre-final submittal. No extra fee is expected and incorporation of this item does not significantly increase construction cost.

16. Increase exterior lighting in the vicinity of the city square.

This item has also been included in the pre-final submittal. No extra design fees are expected, but construction cost will increase by approximately \$11,400.00.

#17 A multi-story bldg must be adapted for live fire in at least two rooms per floor. Details and contractors for post-construction modification can be provided, if not included in this contract.

17. Reinforce one of the buildings for use of live fire.

This item was rejected during the meeting.

#18 Buildings normally have some or all of these features. Every attempt to include them where appropriate should be made.

Buildings should be as realistic as possible with some basements, closets, attics and crawl spaces.

Our Scope-of-Work includes at least one building where each of the items listed occur.

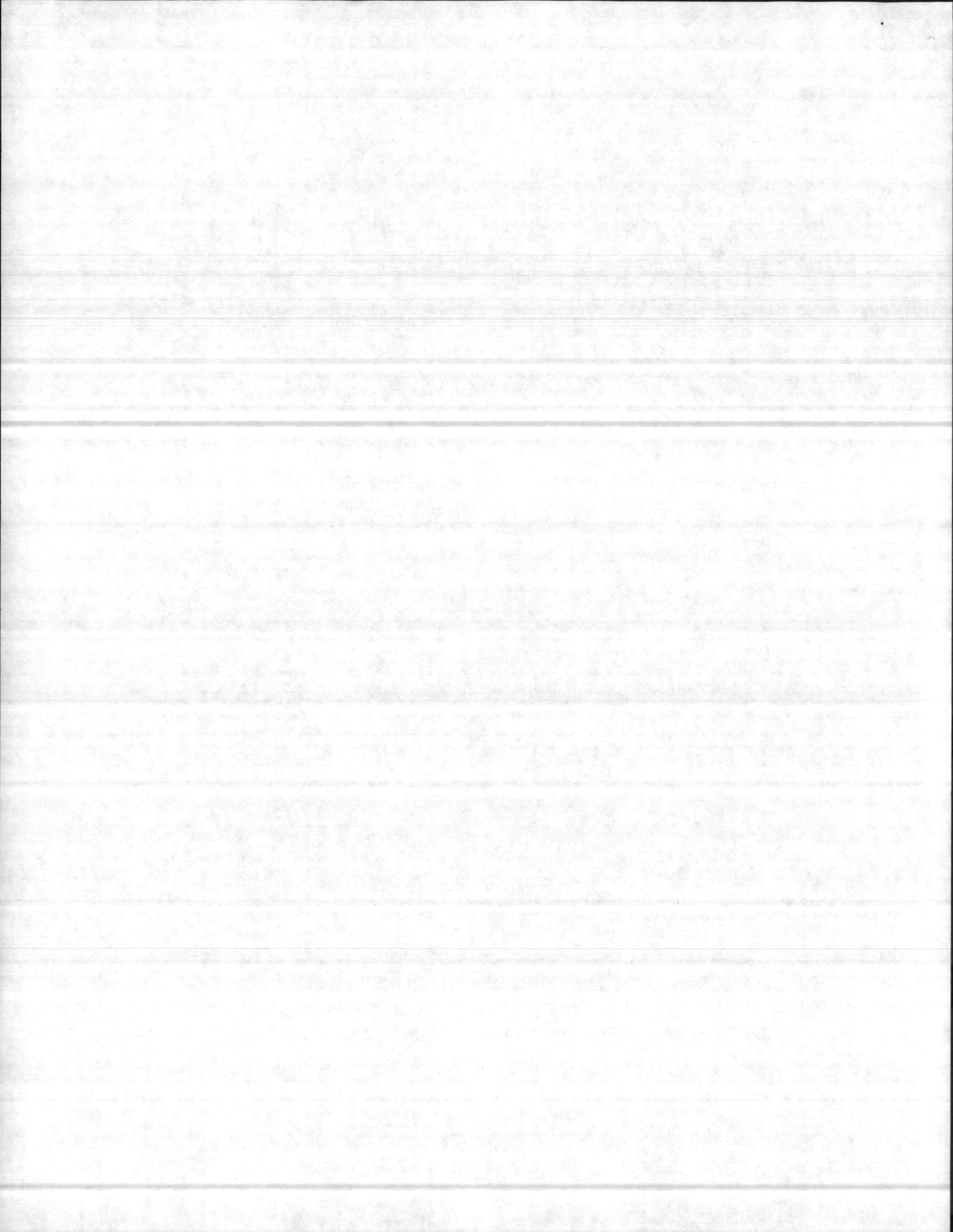
An apartment without closets, City Hall or Hotel without basements and homes or office bldgs without crawl spaces are not common. Bldg clearing considerations require realistic structures or Marnies will get used to not checking these areas.

19. Trees and bushes or hedges should be left standing where possible or added.

It is our intent to leave existing trees, where possible. Due to the extensive amount of grading, however, most of the land within the town limits must be cleared. We will provide additional landscaping within our Scope-of-Work.

20. Construct bridge to handle both the M-60 and M-1 tank.

This work has been accomplished within our existing Scope-of-Work.



- on the hotel*
21. Construct the helicopter landing pad<sup>✓</sup> to accommodate both the CH-53E and V-22 Osprey.

This work is also included within our scope-of-work. Because the helicopters are larger and heavier than expected, the hotel increased in size and construction cost increased approximately \$46,988.00.

22. Balconies should be added.

Balconies are provided on building nos. 1, 3, 4, 5, 9, 10, 11, 13, 14, 15, and 16 within our scope-of-work.

- #23 see item 17* 23. Construct certain buildings capable of live fire.

This item was rejected during the meeting.

24. Design active electrical wiring in conduit underground/dummy wiring above ground.

This item will increase construction cost approximately \$20,000.00 and is not currently within our scope-of-work. We do recommend this recommendation be incorporated into the Project.

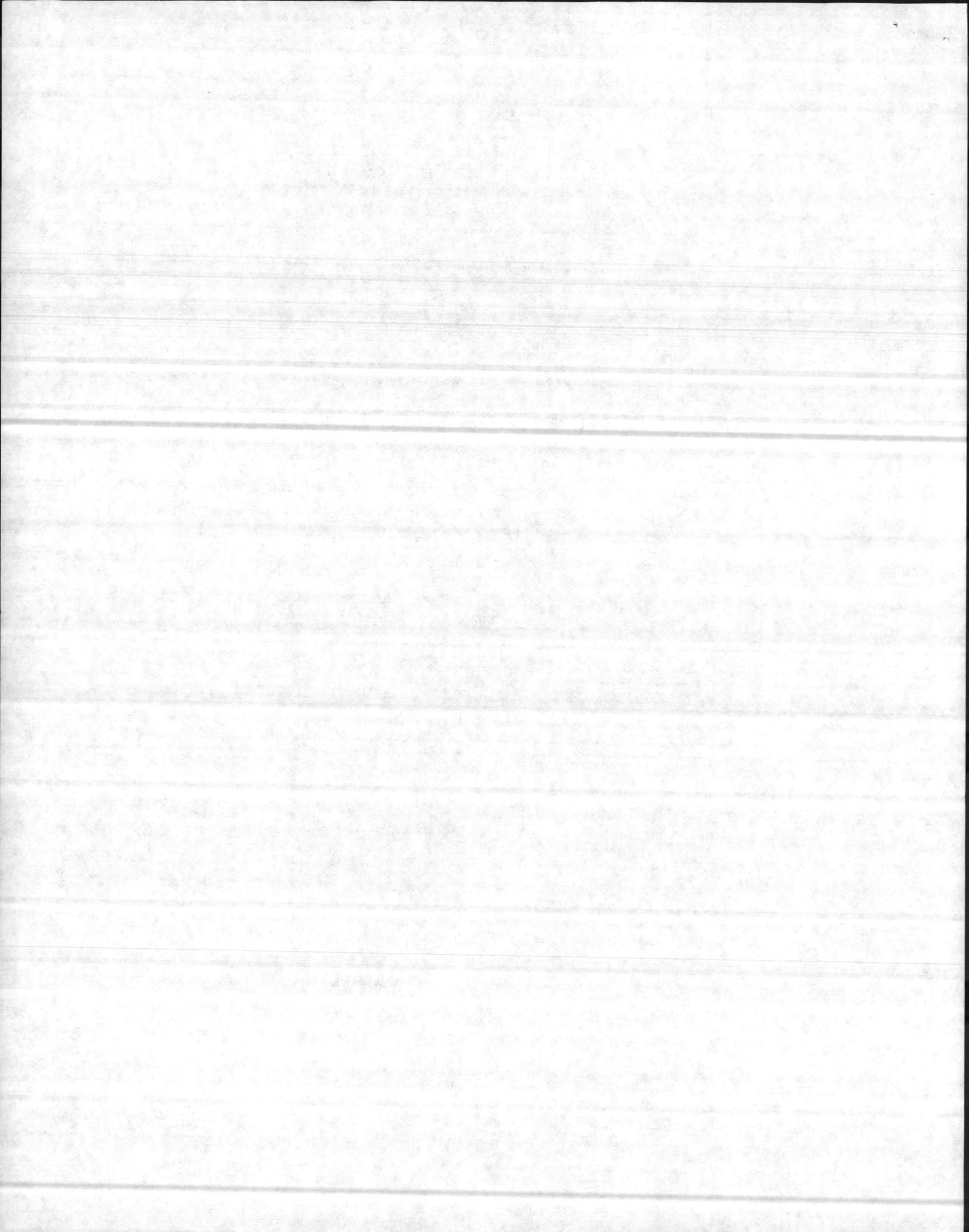
25. Buildings that are reinforced to support fast rope rappelling should be accessible from the roof.

Building nos. 1, 5, 15 and 16 are designed according to this recommendation within our current scope-of-work.

26. Develop a Comprehensive Maintenance Package.

This item was rejected during the meeting.

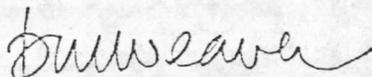
In summary, we think the Activity's suggestions will increase project cost approximately \$504,541.00. We have included \$152,791.00 of the suggestions within our existing scope-of-work. The three additional towers, as noted in item 2, and the underground wiring, as noted in item 24, will increase construction cost approximately \$351,750.00. If you should decide to incorporate all of the Activity recommendations, our fee would be approximately \$21,000.00 for the additional work plus printing costs, etc. As noted at the beginning of this letter, we prefer to wait until you decide which specific items you wish to incorporate before we make a more detailed fee proposal.



If you have any questions, please do not hesitate to contact our office.

Very truly yours,

CLARK TRIBBLE HARRIS AND LI ARCHITECTS, P.A.



D. Michael Weaver, AIA  
Associate

mb

cc: Mr. Fred Estes

*Note: Suggest you investigate Utilex or similiar American made materials for construction of the live-fire ranges (eg. Dodge City, Urban Quick kill, Kill & search, Cover & Clear). This material is more realistic, safer and I believe easier replaced than wood. Comparisons of long term costs are unknown to me, but can be easily determined.*

*R/S.  
JWA  
ph. 2142/2152  
II MAF 50TG*

